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- (2) All miners in the affected areas, unless assigned emergency response duties, must be immediately withdrawn to a safe location identified in the mine emergency evacuation and firefighting program of instruction.
- (g) If the warning signal will be activated during calibration of sensors, personnel manning the surface location must be notified prior to and upon completion of calibration. Affected working sections, areas where mechanized mining equipment is being installed or removed, or other areas designated in the approved emergency evacuation and firefighting program of instruction must be notified at the beginning and completion of calibration.
- (h) If any fire detection component becomes inoperative, immediate action must be taken to repair the component. While repairs are being made, operation of the belt may continue if the following requirements are met:
- (1) If one sensor becomes inoperative, a trained person must continuously monitor for carbon monoxide at the inoperative sensor;
- (2) If two or more adjacent sensors become inoperative, trained persons must patrol and continuously monitor the affected areas for carbon monoxide so that they will be traveled each hour in their entirety. Alternatively, a trained person must be stationed at each inoperative sensor to monitor for carbon monoxide:
- (3) If the complete fire detection system becomes inoperative, trained persons must patrol and continuously monitor the affected areas for carbon monoxide so that they will be traveled each hour in their entirety;
- (4) Trained persons who conduct monitoring under this section must have two-way voice communication capability, at intervals not to exceed 2,000 feet, and must report carbon monoxide concentrations to the surface at intervals not to exceed one hour;
- (5) Trained persons who conduct monitoring under this section must immediately report to the surface any concentration of carbon monoxide that reaches 10 parts per million above the established ambient level, unless the mine operator knows that the source of the carbon monoxide does not present a hazard to miners; and

(6) Handheld detectors used to monitor the belt entry under this section must have a detection level equivalent to that of the system's carbon monoxide sensors.

[37 FR 16545, Aug. 16, 1972, as amended at 73 FR 80615, Dec. 31, 2008]

### § 75.1103-6 Automatic fire sensors; actuation of fire suppression systems.

Point-type heat sensors or automatic fire sensor and warning device systems may be used to actuate deluge-type water systems, foam generator systems, multipurpose dry-powder systems, or other equivalent automatic fire suppression systems.

[73 FR 80615, Dec. 31, 2008]

## § 75.1103-7 Electrical components; permissibility requirements.

The electrical components of each automatic fire sensor and warning device system shall:

- (a) Remain functional when the power circuits are deenergized as required by §75.706; and
- (b) Be provided with protection against ignition of methane or coal dust when the electrical power is deenergized as required by §75.313, but these components shall be permissible or intrinsically safe if installed in a return airway.

[37 FR 16546, Aug. 16, 1972, as amended at 57 FR 20929, May 15, 1992]

## § 75.1103-8 Automatic fire sensor and warning device systems; examination and test requirements.

- (a) Automatic fire sensor and warning device systems shall be examined at least once each shift when belts are operated as part of a production shift. A functional test of the warning signals shall be made at least once every seven days. Examination and maintenance of such systems shall be by a qualified person.
- (b) A record of the functional test conducted in accordance with paragraph (a) of this section shall be maintained by the operator and kept for a period of one year.
- (c) Sensors shall be calibrated in accordance with the manufacturer's calibration instructions at intervals not to exceed 31 days. A record of the sensor

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calibrations shall be maintained by the operator and kept for a period of one year.

[73 FR 80615, Dec. 31, 2008]

# § 75.1103-9 Minimum requirements; fire suppression materials and location; maintenance of entries and crosscuts; access doors; communications; fire crews; high-expansion foam devices.

(a) The following materials shall be stored within 300 feet of each belt drive or at a location where the material can be moved to the belt drive within 5 minutes, except that when the ventilating current in the belt haulageway travels in the direction of the normal movement of coal on the belt, the materials shall be stored within 300 feet of the belt tailpiece or at a location where the materials can be moved to the belt tailpiece within 5 minutes.

- (1) 500 feet of fire hose, except that if the belt flight is less than 500 feet in length the fire hose may be equal to the length of the belt flight. A high expansion foam device may be substituted for 300 feet of the 500 feet of the fire hose. Where used, such foam generators shall produce foam sufficient to fill 100 feet of the belt haulageway in not more than 5 minutes. Sufficient power cable and water hose shall be provided so that the foam generator can be installed at any crosscut along the belt by which the generator is located. A 1-hour supply of foam producing chemicals and tools and hardware required for its operation shall be stored at the foam generator.
- (2) Tools to open a stopping between the belt entry and the adjacent intake entry; and
  - (3) 240 pounds of bagged rock dust.
- (b) The entry containing the main waterline and the crosscuts containing water outlets between such entry and the belt haulageway (if the main waterline is in an adjacent entry) shall be maintained accessible and in safe condition for travel and firefighting activities. Each stopping in such crosscuts or adjacent crosscuts shall have an access door.
- (c) Suitable communication lines extending to the surface shall be provided in the belt haulageway or adjacent entry.

- (d) The fire suppression system required at the belt drive shall include the belt discharge head.
- (e) A crew consisting of at least five members for each working shift shall be trained in firefighting operations. Fire drills shall be held at intervals not exceeding 6 months.

[37 FR 16546, Aug. 16, 1972]

### § 75.1103-10 Fire suppression systems; additional requirements.

For each conveyor belt flight exceeding 2,000 feet in length, where the average air velocity along the belt haulage entry exceeds 100 feet per minute, an additional cache of the materials specified in §75.1103–9(a)(1), (2), and (3) shall be provided. The additional cache may be stored at the locations specified in §75.1103–9(a), or at some other strategic location readily accessible to the conveyor belt flight.

[73 FR 80616, Dec. 31, 2008]

### § 75.1103–11 Tests of fire hydrants and fire hose; record of tests.

Each fire hydrant shall be tested by opening to insure that it is in operating condition, and each fire hose shall be tested, at intervals not exceeding 1 year. A record of these tests shall be maintained at an appropriate location.

[37 FR 16546, Aug. 16, 1972]

## §75.1104 Underground storage, lubricating oil and grease.

[STATUTORY PROVISIONS]

Underground storage places for lubricating oil and grease shall be of fire-proof construction. Except for specially prepared materials approved by the Secretary, lubricating oil and grease kept in all underground areas in a coal mine shall be in fireproof, closed metal containers or other no less effective containers approved by the Secretary.

### § 75.1106 Welding, cutting, or soldering with arc or flame underground.

[STATUTORY PROVISIONS]

All welding, cutting, or soldering with arc or flame in all underground areas of a coal mine shall, whenever practicable, be conducted in fireproof